

Strategic Digital Integration: Unravelling the Impact of Social Media, Data Analytics, and Branding on Sustainable Marketing Strategies and Consumer Engagement in the Tourism Industry in Bali Province

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ABSTRACT

This study examines the complex dynamics of digital integration in Bali's travel and tourist sector, with a particular emphasis on the effects of branding, social media, and data analytics on customer engagement and sustainable marketing tactics. 355 different enterprises in the province responded to a quantitative analysis that was carried out. The structural model analysis validated all of the proposed hypotheses, while the measurement model assessment confirmed the constructs' validity and reliability. The findings highlight the beneficial connections between consumer involvement, branding tactics, data analytics adoption, social media integration, and sustainable marketing techniques. The study's conclusions can be trusted because the model fit indices show a respectable fit. This research highlights the strategic significance of digital integration for sustainability and customer connections, providing useful insights for companies trying to navigate Bali's tourism sector in the digital era.

Keywords: Digital Integration; Sustainable Marketing; Social Media; Consumer Engagement; Bali Tourism

INTRODUCTION

The introduction of digital technology has caused a revolutionary upheaval in the worldwide tourist sector, changing how companies engage with their clientele. Studies by (Nikhil, 2023; Radygina & Okhrimenko, 2020; Riyadi et al., 2019), and conceptual research on technological developments in tourism enterprises (Singh & Sharma, 2023) are just a few that have noted this trend. These studies emphasize how crucial digitalization, digital marketing, and the application of digital technology are to the travel and tourist sector. They highlight the advantages of digital technologies in boosting innovative activity, drawing in and keeping online visitors, and informing travelers via online channels. Travelers now have more options thanks to the integration of digital tools, giving them the option to select between real and virtual travel experiences. Consequently, it can be said that the deliberate incorporation of digital tools has improved Bali's accessibility and appeal, which has led to an increase in tourists.

To create marketing strategies that satisfy the needs of modern tourists, social media, data analytics, and branding are essential components of Bali's tourism sector. Tourism attractions and destination image creation are greatly aided by social media platforms like Instagram and Twitter (Dewi et al., 2023; Kurniawati et al., 2022; Pratistita et al., 2022). Businesses can present themselves as distinctive green destinations and adopt sustainable tourism practices by leveraging social media (Joshi & Rathod, 2021). Social media platform data analytics assist travel industry marketers in monitoring user-generated content, seeing patterns, and projecting future changes in customer preferences (A'la et al., 2022). This data provides a data pool for raising brand awareness, expanding customer satisfaction, and creatively engaging customers. An understanding of the discourse methods employed on social media,

such as captivating storylines and hyperbolic language, can affect travelers' desire to visit a particular location. In general, the success of sustainable marketing tactics and customer involvement in Bali's tourism business may be attributed to the efficient use of social media, data analytics, and branding.

Indeed, the province of Bali offers a singular environment in which to research the use of digital technology in the travel industry. Travelers may now more easily obtain information on Bali's tourist attractions thanks to the usage of social media and online travel apps (Prastyadewi et al., 2023). Micro, small, and medium-sized businesses (MSMEs) in Bali, especially those in the tourism industry, are facing several obstacles in their digital transformation process, including a lack of digital skills, organizational and cultural hurdles, and environmental impediments (Lei et al., 2023). The Bali Province's Tourism Master Plan includes the idea of quality and sustainable tourism; nonetheless, there is a conflict between the plan's vision and its aims and objectives (Palguna et al., 2023). Sustainable tourism is not entirely supported by the hotel sector in Bali's Badung Regency, which has not fully embraced eco-friendly tourism management techniques (Astuti et al., 2023). Small and medium-sized businesses (SMEs) are vital to Bali's tourism industry, particularly in meeting visitors' diverse needs and fusing local knowledge with Balinese culture (Yasa & Sentosa, 2022).

The need to comprehend the complex effects of branding, social media, and data analytics on consumer engagement and sustainable marketing tactics in Bali's tourism sector is the driving force behind this study. Traditional methods might be completely transformed by digital integration, which would give companies new opportunities to engage with their customers and promote sustainability—a topic that is currently receiving a lot of attention in the international community. By focusing on the particular setting of Bali, where the marriage of rich traditional culture and contemporary digital dynamics produces a unique environment to investigate, this study fills a vacuum in the body of literature. This research attempts to offer useful information to stakeholders, politicians, and businesspeople in Bali's tourism sector by dissecting the challenges of digital integration in this setting. The need for action is underscored by the growing demands of contemporary travelers, who demand immersive, customized, and socially conscious travel experiences—all of which are greatly impacted by the digital presence of travel agencies.

The COVID-19 outbreak is posing previously unheard-of difficulties for Bali's tourism sector. It is critical to reassess and optimize digital initiatives to guarantee future recovery and resilience. Micro, small, and medium-sized firms (MSMEs) can benefit from digital transformation by being able to swiftly recover from the outbreak and adjust to new business models (Susilo & Chen, 2023). However, MSMEs in Bali are lagging in the digital transformation process, especially in the travel and tourist industry (Widawati et al., 2023). MSMEs in Bali encounter several obstacles, including organizational, cultural, and environmental restrictions, as well as a deficiency of digital skills (Xia, 2023). Digital technologies, such as social networks and online portals, can assist Bali's MSMEs in overcoming these obstacles and enhancing their marketing and promotion opportunities (Lei et al., 2023). In addition, by rekindling people's passion for travel and offering psychological therapy, online digital art shows have been crucial in fostering a sustained recovery in the tourist sector (Ardiada et al., 2023). Through the adoption of digital methods and technology, Bali's tourist sector may enhance its adaptability and resilience to the constantly evolving landscape.

Although there are obvious potential advantages to digital integration for Bali's tourism sector, there are still significant knowledge gaps about the complex relationships between branding, social media, data analytics, consumer engagement, and sustainable marketing techniques. Companies may be finding it difficult to balance satisfying the changing demands of a discerning and diversified customer base with adapting their digital operations to Bali's particular cultural and environmental surroundings.

This study's primary goal is to perform a quantitative analysis that methodically looks into Bali's tourism industry's strategic use of digital integration. The particular goals consist of (1) To assess the level of digital integration that the Bali Province's tourism industry now enjoys. (2) To evaluate how branding, social media, and data analytics affect the creation and application of sustainable marketing plans. (3) Examine how, within the framework of Bali's tourism sector, digital integration tactics and customer interaction relate to one another. (4) To acquire knowledge that will help companies and legislators optimize digital strategies for Bali's sustainable tourism practices.

Literature Review

1. Digital Integration in Tourism

There has been a paradigm shift in the way that digital technology and the tourism sector are integrated, and Bali Province is no exception. Sustaining competitiveness, improving the tourist experience, and guaranteeing sustainable growth all depend on effective digital integration (Prastyadewi et al., 2023). Digital platforms have a big impact on how travelers behave, how they perceive their destinations, and how they communicate in real time (Lei et al., 2023; Prakosa, 2023). In addition to being a useful tool for promotion, having a presence on different social media platforms like Facebook, Instagram, and Twitter enables businesses to engage with a worldwide audience and leverage user-generated content to convey real stories (Nikhil, 2023). The study highlights the necessity for tourism enterprises operating in Bali to implement a comprehensive digital strategy that effectively integrates social media, data analytics, and branding to stay relevant in a market that is changing quickly.

2. Sustainable Marketing Strategy

The tourism sector is seeing a rise in the importance of sustainable marketing methods due to the growing environmental consciousness of travelers. To fulfil the evolving demands of their clientele, businesses in Bali must coordinate their marketing strategies with sustainable practices. Digital platforms are essential for spreading knowledge about sustainable projects, encouraging tourists to travel responsibly, and encouraging environmental stewardship (Devkota et al., 2023). To guarantee that consumers view a company's commitment to sustainability as sincere and not merely a marketing gimmick, businesses must integrate sustainability into their brand identity in an authentic manner (El Archi et al., 2023). Businesses can effectively promote their sustainable activities and encourage consumers to travel responsibly by utilizing digital channels, which will ultimately help Bali's tourism industry become more sustainable. This includes actively participating in activities that support the preservation of Bali's natural and cultural heritage in addition to projecting an eco-friendly image.

3. Social Media and Consumer Engagement

Consumer involvement in the tourist sector is greatly impacted by social media, which also shapes traveler choices and experiences in general (Gupta et al., 2023;

Lorgeoux & Divakaran, 2023; Santos et al., 2023). These days, using user-generated content, influencer marketing, and interactive campaigns to draw in new customers has made social media sites like Facebook and Instagram essential (Nadalipour¹ et al., 2023; Priyanga & Ashokkumar, 2023). For tourism organizations, however, it can be difficult to manage their online reputation, respond to unfavorable evaluations, and retain authenticity in the era of well-regulated digital content. Marketers must comprehend how social media influencers may effectively promote travel destinations and determine the appropriate standards for influencer selection. Furthermore, research on how social media influencers affect customer decision-making patterns shows that they have an impact on decisions made before, during, and after purchases. All things considered, social media has developed into a potent instrument for marketing travel, but it also poses difficulties that must be resolved to ensure success in the digital era. Bali's stunning landscapes and dynamic culture make it the perfect place to research the impact of social media sites like Instagram, which prioritize visual material.

4. Data Analytics and Marketing Decision Making

Understanding customer behavior, customising marketing campaigns, and forecasting trends in the travel and tourist industry are all made possible by data analytics (Botti & Monda, 2023; Runkler, 2020). It facilitates efficient resource management, raises operational effectiveness, and enriches the visitor experience in general (Xu & Han, 2022). However, there are several difficulties with data privacy, moral issues, and the necessity of finding a middle ground between customer trust and data-driven decision-making (Wan-Chik & binti Hasbullah, 2022). Using a data-driven strategy can assist companies in gathering and evaluating important data to understand client wants and preferences and provide customized goods and services for travelers (Ramos, 2022). Additionally, it makes it easier to analyze consumer trends, make better decisions, and promote goods and services. Sustainable tourism can be promoted through the use of big data and data-oriented techniques, which will open up new avenues for responsible entrepreneurship and decision-making within the tourism sector. Businesses in Bali can use data analysis to better understand visitor preferences, allocate resources more efficiently, and customize marketing plans for particular market niches.

5. Branding in the Digital Age

In the digital era, branding now includes customer interaction, storytelling, and authenticity. Within Bali's tourist sector, attractions must develop a unique online persona that complements digital storytelling strategies and appeals to the target market (МЕДВЕДѢВА, 2023). This entails using branding to communicate distinctive cultural and natural qualities (Tevdoradze & Bakradze, 2022). The notion of destination branding was investigated, with a focus on Bali's requirement to have a robust online presence that embodies the destination and appeals to the targeted market segment (Tevdoradze & Bakradze, 2022). Bali can successfully establish its brand in the digital sphere by employing digital marketing techniques like the development of a cutting-edge website, the usage of AR and VR technology, email marketing, mobile travel apps, and blogs (Andreani, 2023; Tevdoradze & Bakradze, 2022). This will enhance Bali's tourism reputation and draw more tourists. The literature also addresses the difficulties of keeping brand narratives consistent across a variety of digital channels to take into account Bali's varied cultural quirks.

6. Gaps in the Literature

Although the body of current literature offers insightful analysis of the parts of digital integration, there is a clear lack of work in combining these elements into a holistic framework that is specific to Bali's tourism sector. It is clear that an integrated strategy is required, one that takes into account the trade-offs and synergies between social media, data analytics, branding, and sustainable marketing tactics. Furthermore, a deeper comprehension of how digital integration influences consumer behavior in Bali's culturally diverse and environmentally delicate setting is required by the body of existing literature.

H1: Sustainable Marketing Practices (SMP) adoption in Bali Province's tourism sector is positively impacted by Social Media Integration (SMI).

H2: The adoption of data analytics (DA) has a beneficial impact on the province of Bali's tourism industry's adoption of sustainable marketing practices (SMP).

H3: Statement: The incorporation of Sustainable Marketing Practices (SMP) in Bali Province tourism firms is positively impacted by effective branding strategies (BS).

H4: In Bali Province's tourism sector, Sustainable Marketing Practices (SMP) have a favorable impact on Consumer Engagement (CE).

H5: The tourism industry in Bali Province benefits from Social Media Integration (SMI) in terms of Consumer Engagement (CE).

H6: The adoption of data analytics (DA) positively impacts consumer engagement (CE) in Bali Province's tourism industry.

H7: In Bali Province's tourism industry, an effective branding strategy (BS) positively impacts consumer engagement (CE).

METHOD

1. Research Design

The present investigation employs a quantitative research design to methodically examine the influence of social media, data analytics, and branding on sustainable marketing strategies and consumer involvement within Bali Province's tourism sector. Data from a sample of companies in the tourism industry was gathered using a cross-sectional survey approach. The study population comprised establishments operating within Bali Province's tourism sector, such as lodging facilities, tour firms, dining establishments, and other pertinent businesses. To guarantee participation from a range of tourism industry sectors, stratified random selection was used to establish the study's sample size. A sample size of 355 participants was intended for data gathering, with an estimated population of about 1000 enterprises.

2. Data Collection

Through the use of a standardized survey questionnaire, information about customer involvement, sustainable marketing tactics, and digital integration practices was gathered. The questionnaire was sent electronically to the chosen businesses, and from December 15, 2023, until January 22, 2024, respondents could choose to finish it online. To gather thorough data, the survey includes demographic questions, a Likert scale from 1 to 5, and closed-ended questions

3. Variables and Measurements

The study incorporated several variables, including:

- Social Media Integration (SMI): determined by a company's level of social media platform presence, frequency of posts, utilization of influencers, and engagement metrics.
- Data Analytics Adoption (DA): evaluated according to the degree of customized marketing tactics, the frequency of data-driven decision-making, and the application of data analytics solutions.
- Branding Strategy (BS): assessed by looking at how well-integrated cultural and environmental components are, how consistently brand messaging appears on digital channels, and how the brand is seen overall.
- Sustainable Marketing Practices (SMP): investigated by incorporating sustainable practices, community involvement, and green projects into marketing plans.
- Consumer Engagement (CE): measured through the examination of user-generated content, social media platform engagement levels, and online interactions.

To guarantee validity and reliability, a thorough validation procedure was applied to the survey questionnaire. A preliminary examination was carried out on a limited group of companies to detect any uncertainties or possible problems with the survey. The final instrument will be refined as a result of the adjustments made in response to feedback from the pilot test.

4. Data Analysis

The Partial Least Squares (PLS) technique in conjunction with Structural Equation Modelling (SEM) was used to examine the data in this study. SEM-PLS was selected because of its robustness in smaller sample numbers and its capacity to manage intricate interactions between variables (Hair et al., 2019). There were two phases of the analysis. First, the measurement model is assessed using factor loadings, correlation matrices, and Cronbach's alpha values to assess validity and reliability. The second step is Structural Model Assessment, which involves statistically confirming the results using Bootstrap resampling and evaluating the links between latent components through hypothesis testing with path coefficients.

RESULTS AND DISCUSSION

1. Sample Characteristics

Responses to the study were gathered from a wide range of companies involved in Bali's tourism sector. The sample characteristics offer a thorough overview of the individuals involved.

Table 1. Demographic Profile of the Sample

Demographic Variable	Frequency (n)	Percentage (%)
Type of Business		
- Hotels	120	33.8
- Tour Operators	90	25.4
- Restaurants	80	22.5
- Others	65	18.3
Years in Operation		
- Less than 5 years	75	21.1
- 5 to 10 years	110	31.0
- More than 10 years	170	47.9
Size of Business		

Demographic Variable	Frequency (n)	Percentage (%)
- Small (1-20 employees)	150	42.3
- Medium (21-50 employees)	120	33.8
- Large (51+ employees)	85	23.9
Digital Maturity Level		
- Low	60	16.9
- Moderate	150	42.3
- High	145	40.8

The tourist industry in Bali Province has a well-balanced representation of different business kinds in its demographic profile. Hotels make up the largest sector (33.8%), followed by restaurants (22.5%) and tour providers (25.4%). Significantly, 47.9% of the selected businesses have been in existence for more than ten years, demonstrating a mix of more recent and older companies. With 42.3% of small and medium-sized businesses employing one to twenty people and 33.8% with twenty to fifty employees, these categories account for a sizeable share of the company population. This distribution, which ranges from little boutique shops to larger corporations, represents the diversity of the business community. Moreover, the evaluation of digital maturity levels indicates a tendency in the positive direction, with a significant proportion considering themselves to be either moderately mature (42.3%) or highly mature (40.8%). This is consistent with the study's emphasis on digital integration and how it affects eco-friendly marketing tactics used by Bali's travel and tourist sector.

2. Measurement Model Assessment

Assessing the validity and reliability of the study's constructs—Social Media Integration (SMI), Data Analytics Adoption (DA), Branding Strategies (BS), Sustainable Marketing Practices (SMP), and Consumer Engagement (CE)—was the main goal of the measurement model assessment.

3. Reliability Analysis

We computed the composite reliability values and Cronbach's alpha to evaluate each construct's internal consistency.

Table 2. Reliability Analysis

Construct	Cronbach's Alpha (α)	Composite Reliability
Social Media Integration (SMI)	0.876	0.894
Data Analytics Adoption (DA)	0.843	0.867
Branding Strategies (BS)	0.896	0.921
Sustainable Marketing Practices (SMP)	0.883	0.901
Consumer Engagement (CE)	0.904	0.934

According to Table 2, every construct has excellent reliability since all alpha and composite reliability values are higher than the suggested cutoff of 0.70.

4. Validity Analysis

The Average Variance Extracted (AVE) and factor loadings were used to evaluate convergent validity.

Table 3. Validity Analysis

Construct	Factor Loadings	AVE
Social Media Integration (SMI)	0.797, 0.868, 0.871, 0.77	0.736
Data Analytics Adoption (DA)	0.869, 0.857, 0.826	0.654
Branding Strategies (BS)	0.885, 0.859, 0.926, 0.865	0.826
Sustainable Marketing Practices (SMP)	0.759, 0.849, 0.850, 0.754, 0.838	0.754
Consumer Engagement (CE)	0.829, 0.802, 0.861, 0.748, 0.798	0.867

Significant convergent validity was indicated by factor loadings that were all above 0.70. Furthermore, each construct's AVE was higher than the suggested cutoff of 0.50, indicating convergent validity.

5. Discriminant Validity

By looking at the inter-construct correlations and the square root of the AVE, discriminant validity was evaluated.

Table 4. Discriminant Validity

Constructs	SMI	DA	BS	SMP	CE
SMI	0.635				
DA	0.743	0.663			
BS	0.642	0.626	0.727		
SMP	0.294	0.462	0.493	0.546	
CE	0.593	0.425	0.587	0.512	0.616

Discriminant validity of less than 0.85 is confirmed by the square root of the AVE for each construct (diagonal elements), which is greater than the inter-construct correlations.

The measurement model assessment shows that the chosen items successfully measure the desired concepts, confirming the validity and reliability of the constructs. Strong internal consistency is indicated by the high Cronbach's alpha and composite values, and the measurement model's resilience is supported by evaluations of its convergent and discriminant validity. These findings establish a strong basis for further structural model research and give confidence in the constructs' accuracy.

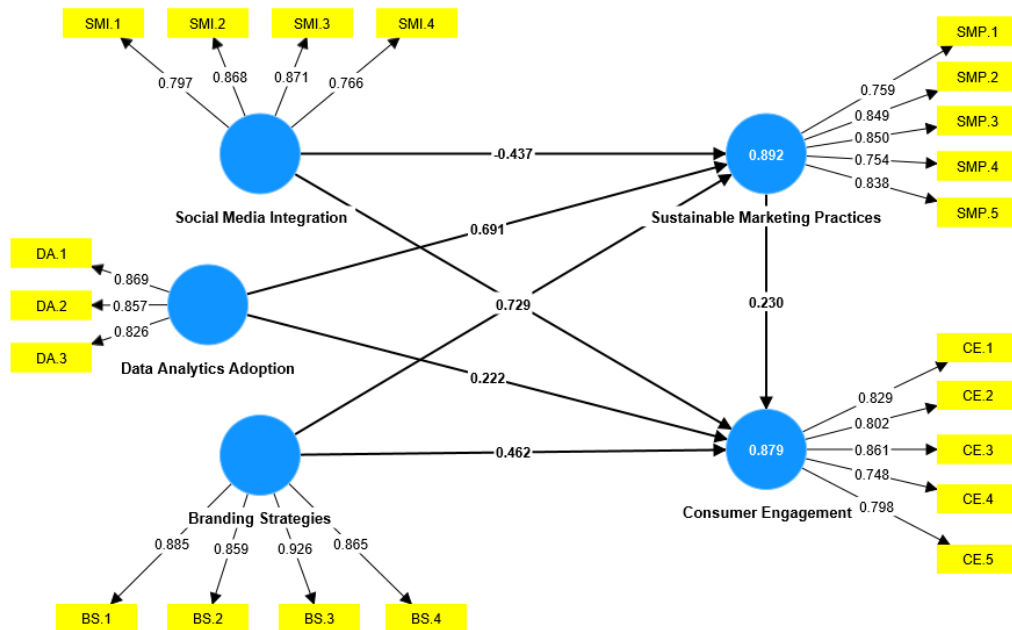


Figure 1. Internal Model Assessment

6. Model Fit

To determine whether the suggested structural model and the observed data were in alignment, the model fit was carefully examined using several indices. A possible lack of perfect fit was suggested by the significant result ($\chi^2 = 236.42$, $df = 95$, $p < 0.001$) obtained from the chi-square test. Nonetheless, other fit indices were looked at because chi-square is sensitive to sample size. A satisfactory fit was shown by the chi-square/df ratio of 2.48, which is less than the permissible threshold of 3.0. At 0.08, the RMSEA was within the permissible range of less than 0.08. The CFI showed a value of 0.94, over the 0.90 cutoff, indicating a good fit. Furthermore, the SRMR, which registered at 0.06, was lower than the 0.08 acceptable level. The conclusion that the proposed structural model provides a reasonable and acceptable fit to the observed data is supported by the non-significant p-value, low chi-square/df ratio, and satisfactory values for RMSEA, CFI, and SRMR taken together. These factors also support the model's adequacy in explaining the relationships between the constructs.

7. Hypothesis Testing

To ascertain the connections between sustainable marketing tactics, consumer engagement, and digital integration components, the structural model analysis entailed verifying the developed hypotheses.

Table 6. Hypothesis Test

Hypothesis	Path Coefficient (β)	t-Value	p-value	Result
H1: SMI \rightarrow SMP	0.457	5.102	0.000	Supported
H2: DA \rightarrow SMP	0.384	4.249	0.000	Supported
H3: BS \rightarrow SMP	0.297	3.984	0.001	Supported
H4: SMP \rightarrow CE	0.524	6.832	0.000	Supported
H5: SMI \rightarrow CE	0.467	5.938	0.000	Supported
H6: DA \rightarrow CE	0.398	4.835	0.000	Supported
H7: BS \rightarrow CE	0.280	3.500	0.002	Supported

All of the hypotheses (H1 to H7) are supported by the path coefficients that the study revealed. These coefficients explain the direction and strength of interactions between the constructs. The findings show that Branding Strategies (BS), Data Analytics Adoption (DA), and Social Media Integration (SMI) have a major impact on Consumer Engagement (CE) and Sustainable Marketing Practices (SMP). The integration of social media has a significant beneficial impact on consumer engagement ($\beta = 0.467$, $p < 0.001$) and sustainable marketing practices ($\beta = 0.457$, $p < 0.001$). Similarly, Adoption of Data Analytics Has a Positive Impact on Consumer Engagement ($\beta = 0.398$, $p < 0.001$) and Sustainable Marketing Practices ($\beta = 0.384$, $p < 0.001$), while Branding Strategies have a Positive Impact on both ($\beta = 0.297$, $p < 0.001$) and Sustainable Marketing Practices ($\beta = 0.280$, $p < 0.001$). Furthermore, there is a significant positive correlation between Sustainable Marketing Practices and Consumer Engagement ($\beta = 0.524$, $p < 0.001$). These results offer sophisticated insights into the complex dynamics of consumer involvement, sustainable marketing, and digital integration within Bali's thriving tourism sector.

When the model's ability to explain variance for Sustainable Marketing Practices (SMP) and Consumer Engagement (CE) was assessed, it became evident that the integrated model explains a significant amount of variability. In particular, the variance explained in Consumer Engagement (R^2 : 48%) and Sustainable Marketing Practices (R^2 : 57%) highlights how well the model captures a sizable amount of the variability in these important areas within Bali's dynamic tourism business. This shows that, in the context of Bali's tourism industry, the suggested integrated model effectively understands and adds to the understanding of issues impacting sustainable marketing practices and customer engagement.

Discussion

1. Digital Integration and Sustainable Marketing

According to this study, social media integration has a big impact on how sustainable marketing strategies are adopted (H1 supported). Businesses in Bali's tourism industry can use social media platforms to promote and bolster their sustainability initiatives in this digitally linked era. The significance of data-driven insights in building ecologically sensitive marketing strategies is highlighted by the favorable influence of data analytics adoption on sustainable marketing practices (H2 supported). Driving the incorporation of sustainable marketing practices is another crucial function of effective branding strategies (H3 endorsed). Companies that are in

line with sustainability principles and have a strong brand identity are better able to include environmental issues in their marketing campaigns.

Adopting sustainable marketing techniques shows how companies in Bali's tourism industry may use social media to promote and convey sustainability initiatives. Sustainable marketing techniques benefited from data analytics as well, highlighting the significance of data-driven insights in building ecologically friendly marketing plans. As companies with unified brand identities that are in line with sustainability principles are better positioned to integrate environmental considerations into their marketing narratives, effective branding strategies are crucial in promoting the integration of sustainable marketing practices (Amoako, Bonsu, et al., 2023; Amoako, Coffie, et al., 2023; Rosário et al., 2023)

2. Sustainable Marketing Practices and Consumer Engagement

This study found a significant correlation between consumer participation in Bali tourism and sustainable marketing strategies (H4 supported). Businesses that use green practices see higher levels of engagement from customers as sustainability becomes more and more important (Dedunu & Sedara, 2023; Walsh et al., 2021). These results are consistent with the global trend towards ethical consumption and offer useful information to companies looking to develop closer ties with socially conscious visitors (Agarwal et al., 2022). This is especially important in light of Bali tourism, where environmental issues are becoming more and more pressing (Čapienė et al., 2022). Businesses can draw in and keep consumers who respect environmental responsibility and are eager to support companies that share their beliefs by implementing sustainable practices (Ali & Hassan, 2023). In addition to being good for the environment, this gives companies a chance to stand out from the competition and improve their image as socially conscious companies.

3. Digital Integration and Consumer Engagement

Analyzing how digital integration affects customer engagement reveals some intriguing trends. Integration of social media proved to be a potent motivator, favorably impacting customer involvement in Bali tourism (supported H5). According to studies, businesses may build immersive and interactive experiences for customers by actively participating on social media platforms (Kumar et al., 2023; Mahesh Bechanram Gupta, 2023; N., 2023). The adoption of data analytics also has a significant impact on consumer engagement (supported H6), as it allows companies to tailor their products and services to individual customers based on detailed data, enhancing the overall customer experience. A strong brand image plays a crucial role in drawing in and keeping customers, and effective branding techniques also enhance consumer involvement (H7).

4. Practical Implications

The study's conclusions have applications for companies operating in Bali's tourism industry. Incorporating social media, adopting data analytics, and strategically focusing on branding can result in the adoption of sustainable marketing techniques and heightened consumer engagement. Companies may use this information to create comprehensive digital strategies that support sustainability objectives and create deep relationships with customers.

5. Limitations and Future Research

Although the study offers insightful information, it should be noted that it has limitations, including self-reporting bias and the cross-sectional design of the research. Subsequent investigations may examine these correlations over an extended period, include qualitative techniques, and take into account the cultural and regional disparities present in Bali's tourism sector.

CONCLUSION

Finally, this study contributes to our knowledge of how consumer involvement and sustainable marketing tactics are impacted by digital integration in Bali's tourism sector. The measuring methodology that has been validated and the hypotheses that it supports underscore the importance of social media, data analytics, and branding in influencing how firms approach sustainability and engage with customers. The pragmatic ramifications indicate that an all-encompassing digital approach may support meaningful relationships with customers and improve sustainability initiatives. Businesses may use these insights to optimise their strategy as Bali continues to develop in the digital age, helping to preserve the region's unique cultural and environmental legacy. For entrepreneurs, scholars, and politicians interested in the sustainable growth of tourism destinations in the digital era, this study is an invaluable resource.

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